

03050106-010

(Broad River)

General Description

Watershed 03050106-010 is located Union, Chester, and Fairfield Counties and consists primarily of the **Broad River** and its tributaries from the Pacolet River to the Tyger River. The watershed occupies 77,201 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Wilkes-Pacolet-Winnsboro series. The erodibility of the soil (K) averages 0.24, and the slope of the terrain averages 21%, with a range of 6-40%. Land use/land cover in the watershed includes: 77.3% forested land, 10.4% agricultural land, 8.4% scrub/shrub land, 2.7% water, 0.7% barren land, and 0.5% urban land.

This section of the Broad River accepts drainage from its upper reach, together with Robertson Branch, Fanning Creek (Sharps Creek), George Branch, Osborn Branch, and the Turkey Creek Watershed. Hughes Creek (Lake John D. Long, Vanderford Branch) enters the river next followed by the Browns Creek Watershed, McCluney Creek, Little Turkey Creek, Clarks Creek, Neals Creek (Hobsons Creek), Mineral Creek, Coss Creek, and the Sandy River Watershed. There are several lakes and ponds (totaling 150.8 acres) in this watershed and 155.5 stream miles, all classified FW. The lower three-quarters of the watershed, below Turkey Creek, resides within the Sumter National Forest.

Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
B-344	W	FW	LAKE JOHN D. LONG IN FOREBAY NEAR DAM
B-778	BIO	FW	NEALS CREEK AT SR 86
B-046	P	FW	BROAD RIVER AT SC 72/215/121, 3 MI E OF CARLISLE

Broad River (B-046) – Aquatic life uses are fully supported. There is a significant decreasing trend in pH. A very high concentration of cadmium was measured in 1997. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Neals Creek (B-778) – Aquatic life uses are fully supported based on macroinvertebrate community data.

Lake John D. Long (B-344) - Lake John D. Long is a 78-acre impoundment on Hughes Creek in Union County, with a maximum depth of approximately 31 feet (9.4 m) and an average depth of 16 feet (4.9 m). Lake Long's watershed comprises approximately 1.9 square miles (5.0 km). In an effort to provide access for boating and fishing, triploid grass carp were stocked in 1991 and aquatic herbicides were applied in 1986, 1987, 1991 and 1994-1996. More recent efforts to clear access for boating and fishing include applying aquatic herbicide in 2000. Aquatic life uses are not supported due to pH excursions. Recreational uses are fully supported.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM</i> <i>FACILITY NAME</i> <i>PERMITTED FLOW @ PIPE (MGD)</i> <i>COMMENT</i>	<i>NPDES#</i> <i>TYPE</i> <i>LIMITATION</i>
BROAD RIVER CONE MILLS/CARLISLE PLT PIPE #: 001 FLOW: 2.0 PIPE #: 002 FLOW: 0.04 PIPE #: 003 FLOW: 0.12 WQL FOR TRC	SC0001368 MAJOR INDUSTRIAL EFFLUENT WATER QUALITY EFFLUENT
BROAD RIVER SCE&G/NEAL SHOALS HYDRO PIPE #: 001 FLOW: M/R	SC0002186 MINOR INDUSTRIAL EFFLUENT
BROAD RIVER LOCKHART TREATMENT FACILITY PIPE #: 001 FLOW: 0.169	SC0003051 MINOR DOMESTIC EFFLUENT
BROAD RIVER CLARIANT CORP./LEEDS PLT PIPE #: 001 FLOW: M/R	SC0022756 MINOR INDUSTRIAL EFFLUENT

Nonpoint Source Management Program

Camp Facilities

<i>FACILITY NAME/TYPE</i> <i>RECEIVING STREAM</i>	<i>PERMIT #</i> <i>STATUS</i>
LEEDS HUNT CAMP/FAMILY BROAD RIVER TRIBUTARY	12-307-0008 ACTIVE
WOODS FERRY/FAMILY BROAD RIVER	12-307-0005 ACTIVE

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME</i> <i>FACILITY TYPE</i>	<i>PERMIT #</i> <i>STATUS</i>
BENNETT LANDFILL (SHORT TERM) CONSTRUCTION	122901-1301 -----
BENNETT C&D LANDFILL (LONG TERM) CONSTRUCTION	122493-1201 -----

Mining Activities

<i>MINING COMPANY</i> <i>MINE NAME</i>	<i>PERMIT #</i> <i>MINERAL</i>
MCINTYRE SAND CO., INC. CUDD SAND MINE	0909-87 SAND

MCINTYRE SAND CO., INC. JORDAN FOWLER TRACT	1243-87 SAND
MCINTYRE SAND CO., INC. ASKEW MINE	0684-87 SAND
SLOAN CONSTRUCTION CO., INC. LOCKHART MINE	0471-87 SAND
UNION COUNTY CARLISLE PIT	0311-87 SAND

Water Supply

<i>WATER USER STREAM</i>	<i>TOTAL PUMP. CAPACITY (MGD) RATED PUMP. CAPACITY (MGD)</i>
CITY OF UNION	23.8
BROAD RIVER	8.0
CARLISLE CONE MILLS	8.1
BROAD RIVER	5.7

Growth Potential

There is a low potential for future growth in this watershed, which contains the Town of Lockhart and a portion of the Town of Carlisle. Public water and sewer services are available in Carlisle. The Sumter National Forest effectively excludes a large portion of the watershed from development.